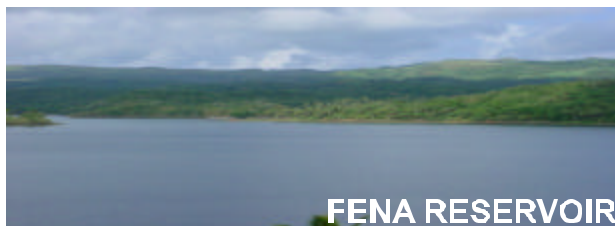


# 2003 Annual Water Quality Report

This annual report contains information about the quality of the water supplied by the U.S. Navy Water System during the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2003. Included as part of this report is a table entitled “**2003 U.S. NAVY WATER QUALITY DATA**”, which provides details on the water quality of our system.

This report will help you, our customer, understand the relationship between the contaminants found in drinking water, activities that may contaminate the water supply, and their associated health effects.



## THE U.S. NAVY WATER SYSTEM

The U.S. Navy Public Works Center Guam and Raytheon Technical Services Guam, Inc. through a subcontract with Earth Tech, Inc. operates the U.S. Navy Water System.

The Fena Reservoir is the primary source of water for the U.S. Navy Water System, and is supplemented by the Almagosa and Bona Springs. Water from the reservoir and springs is processed at the Fena Water Treatment Plant before distribution. Our plant was built in the 1950s. Recent upgrades have been made at our plant to meet the latest EPA treatment standards. In addition, a total of eleven (11) groundwater wells - three (3) at the Naval Hospital area, two (2) at Barrigada, two (2) at South Finegayan, and four (4) at North Finegayan further augment our water system.

## WHAT ARE DRINKING WATER CONTAMINANTS AND WHERE DO THEY COME FROM?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water moves over land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in untreated water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- *Inorganic contaminants*, such as metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities;
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

## Navy Water Quality Performance

USEPA and Guam EPA set Maximum Contaminant Level (MCL's) standards that limit the amount of certain contaminants in drinking water.

*National Primary Drinking Water Regulations* set limits for contaminants in drinking water and standards for water treatment that primarily safeguard health.

National Secondary Drinking Water Regulations are non-enforceable guidelines for limiting contaminants in drinking water that affect its aesthetic quality (i.e. taste, smell, appearance, staining properties, etc.). Meeting these standards ensure that the tap water we provide to you is both safe and aesthetically pleasing to drink.

## A. PRIMARY DRINKING WATER STANDARDS

The U.S. Navy Water System met all but one (1) Primary Drinking Water Maximum Contaminant Level (MCL) standards in 2003.

Coliform bacteria are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Standards require that no more than five (5) percent of monthly samples test positive for total coliform. In March 2003, this standard was not met.

The positive detections were attributed to low water usage and lack of hydrant flushing in an isolated area at the Naval Magazine. Extended fire hydrant and tap flushing have corrected the problem. The problem area is now on a routine hydrant flushing schedule to prevent future occurrences.

## B. AESTHETICS (SECONDARY CONTAMINANTS)

Water samples taken from various locations and at different times throughout the year, found infrequent occurrences of high levels of iron, chlorides, Total Dissolved Solids (TDS), corrosivity, and some color units that were more than recommended levels. These contaminants, while related to poor aesthetic quality of water, do NOT indicate a health hazard. Systematic and routine waterline flushing has helped to improve the aesthetic quality of our drinking water.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline (800-426-4791).



## HOW CAN YOU REPORT A WATER QUALITY COMPLAINT?

When you notice that your water is discolored we strongly encourage you to report your complaint to the Work Control Center Trouble Desk at **333-2011**. Once the complaint is received, arrangements are made to have the water tested to ensure it is safe to drink. Our maintenance division also flushes the fire hydrants on a regular basis in order to expel the stagnant water and draw in chlorinated water to prevent growth of harmful, disease-causing bacteria in the distribution system.

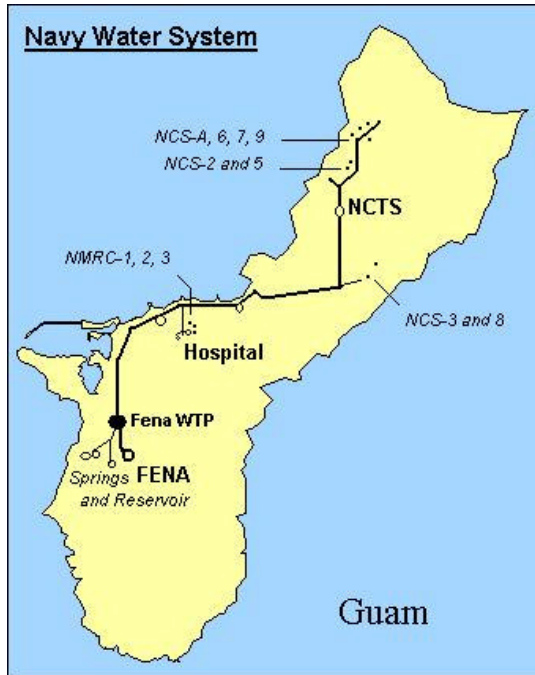
## HEALTH PRECAUTIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as cancer patients undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly or infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.



## HOW CAN YOU OBTAIN ADDITIONAL INFORMATION?

For additional information about the U.S. Navy Water System or this report, please feel free to call Raytheon Technical Services Guam (RTSG), Inc. Environmental Compliance Office at **339-8023**, the U.S. Navy Public Works Center Guam, Environmental Services Department at **339-4100**, or the Guam EPA Safe Drinking Water Program at **475-1660/1**.



DEPARTMENT OF THE NAVY  
Commander U.S. Naval Forces, Marianas  
Navy Housing Welcome Center (N7)  
PSC 455, Box 50  
FPO AP 96540-0051

# 2003 Water Quality Report



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